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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/088,600

06/04/2002

Satoshi Yoshida

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6882

2292

7590

08/25/2005

BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER

STEPHENS, JACQUELINE F

ART UNIT

PAPER NUMBER

3761

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/088,600	<b>Applicant(s)</b> YOSHIDA ET AL.	
	<b>Examiner</b> Jacqueline F. Stephens	<b>Art Unit</b> 3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Note: Since applicant has incorporated remarks set forth at page 6, line 6 to page 9, line 10 of the prior reply dated and filed 6/23/05, the examiner repeats response to those remarks.

Applicant's arguments filed 6-23-05 have been fully considered and they are not persuasive. Claim 6 was finally rejected on pages 6 and 7 of the Office Action mailed 3/10/05. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). With respect to the declaration and applicant's argument that the melt viscosities of the hot melt adhesives taught in Alper et al. USPN 5149741 do not overlap the hot melt adhesives of the present invention nor are the melt viscosity limitations of the present invention arbitrary, the specification of the present invention provides support for hot melt viscosities in a range of 10-1000 Pas. The specification further provides criticality for a melt viscosity not less than 10 Pas and not more than 1000Pas. The specification does not provide criticality for 30-100Pas, only that this melt viscosity is a preferred range. As stated in the Office Action mailed 3/10/05, Alper discloses a similar

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composition for the hot melt adhesive as described in the present invention - see Alper col. 4, lines 1-12 and col. 7, line 1 through col. 9, line 20. Because Alper discloses similar components, the invention of Alper would also obviously provide the claimed performance characteristics. Alper further teaches varying the concentration of the SIS copolymer results in changes in viscosity and the various concentrations of the copolymer are acceptable for different end uses (col. 10, lines 40-51 and col. 14, line 45 through col. 17, line 33). Thus, it is within the level of one of ordinary skill in the art to determine the claimed viscosity since discovering an optimum value of a result effective variable involves only routine skill in the art.

Applicant argues the requirement of a polypropylene tab would be easily melted or not able to function properly if used in combination with an adhesive. However, newly cited reference Goulait, teaches a polypropylene tab in conjunction with a hot melt adhesive.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alper USPN 5149741 in view of Goulait et al. USPN 5482588 and further in view of Fries et al. USPN 5549592.

5. As to claim 1, Alper discloses a hot melt adhesive for bonding components of disposable diapers (col. 17, lines 52-56). Alper does not specifically disclose a disposable diaper having the claimed elements. However, it is old and well known and, therefore, obvious to one of ordinary skill in the art, that disposable diapers and sanitary napkins comprise a liquid-permeable topsheet, a liquid-impermeable backsheet, and a liquid-retentive absorbent member disposed between the topsheet and backsheet. Alper discloses the adhesive is suitable for bonding tape tabs (col. 1, line 61 through col. 2, line 2). Alper is silent as to the composition of the tape tab. Goulait et al. discloses polypropylene tape tabs secured to an absorbent article by hot melt adhesives (col. 3, lines 63-65 and col. 6, lines 46-50). It would have been obvious to one having

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ordinary skill in the art at the time the invention was made to use a polypropylene tape tab with the adhesive of Alper, since Goulait discloses polypropylene is a preferred material for tape tabs for disposable articles and doing so would provide a material that is relatively strong to resist tearing.

Alper/Goulait discloses the hot melt adhesive (of Alper) has a melt viscosity within the claimed range (Alper Table 1 and Table 2 and col. 18, lines 1-2). Additionally, Alper discloses similar composition for the hot melt adhesive as described in the present invention – col. 4, lines 1-15 and col. 5, line 27 through col.9, line 17 and Examples 1 and 2 where Alper discloses the base polymer, tackifier, softener, and antioxidant similar to the disclosed materials used in the present invention. Therefore the hot melt adhesive of Alper/Goulait would be capable of providing both good shear resistance characteristics and good peeling strength characteristics.

While Alper/Goulait discloses the adhesive can be used for fastening tape tabs on a diaper as discussed above, Alper/Goulait does not specifically disclose a side flap on each side of a back portion of the diaper and a tape tab for fastening the diaper on each side flap. Fries discloses a disposable undergarment having a tape fastener adhered to a nonwoven side flap (col. 16, lines 36-60 and col. 17, lines 35-37) for the benefit of providing a stronger and more reliable fastening system (col. 1, lines 37-40). It would have been obvious to one having ordinary skill in the art to use a combined structure of the tab fastener with a nonwoven side flap in the invention of Alper/Goulait for the benefits disclosed in Fries.

As to the materials used in the side flap, pages 3 and 4 of the specification sets forth materials capable of having the claimed test results. Alper/Goulait/Fries teaches similar materials for the nonwoven layer and (Fries col. 16, line 36 through col. 18, line 16). Thus, Alper/Goulait/Fries obviously includes a tape tab and side flap capable of the claimed test results. When the structure recited in the reference is substantially identical to that of the claims of the instant invention, claimed properties or functions are presumed to be inherent (MPEP 2112-2112.01). A *prima facie* case of either anticipation or obviousness has been established when the reference discloses all the limitations of a claim except a property or function and the examiner can not determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention but has basis for shifting the burden of proof as in *In re Fitzgerald*, 619 F.2d 67, 70 205 USPQ 594, 596 (CCPA 1980).

As to claim 2, Alper/Goulait/Fries discloses the present invention substantially as claimed. However, Alper/Fries does not disclose the claimed basis weight of the nonwoven fabric. In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.

As to claims 3 and 6, Alper/Goulait/Fries discloses a method for applying adhesive to a substrate Alper/Fires discloses the adhesive is suitable for diapers ( Alper col. 1, lines 58-67) where the hot melt adhesive is contained in a tank of an applicator to an application head through a feed conduit (Alper col. 2, lines 56-62). Alper discloses the tank is heated and the application system is heated (Alper col. 1, lines 39-45; col. 2, lines 56-66). Alper does not specifically disclose the adhesive in the application head has a temperature lower than the adhesive in the tank. However, Alper discloses the need for the adhesive going to the substrate to be cooled (Alper col. 2, line 56 through col. 3, line 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the temperature of the adhesive in the application head to be lower than the temperature of the adhesive in the tank so the adhesive being deposited on the substrate is cool enough for heat-sensitive fibers, which Alper teaches is desired (Alper col. 3, lines 3-5).

As to the materials used in the side flap, pages 3 and 4 of the specification sets forth materials capable of having the claimed test results. Alper/Goulait/Fries teaches similar materials for the nonwoven layer and (Fries col. 16, line 36 through col. 18, line 16). Thus, Alper/Goulait/Fries obviously includes a tape tab and side flap capable of the claimed test results. When the structure recited in the reference is substantially identical to that of the claims of the instant invention, claimed properties or functions are presumed to be inherent (MPEP 2112-2112.01). A *prima facie* case of either anticipation or obviousness has been established when the reference discloses all the



limitations of a claim except a property or function and the examiner can not determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention but has basis for shifting the burden of proof as in *In re Fitzgerald*, 619 F.2d 67, 70 205 USPQ 594, 596 (CCPA 1980).

As to the spread of the hot-melt adhesive, Alper/Goulait/Fries does not specifically disclose the claimed spread. However, Alper discloses a hot melt adhesive that has good shear resistance and 180° peel strength characteristics (Alper col. 4, lines 61-68; col. 14, lines 2-10, Table I, col. 17, lines 52-63) as well as an adhesive formulated from similar compositions and used in the same manner, for disposable diapers. Therefore, one of ordinary skill in the art would be able to determine through routine experimentation the ideal spread necessary for applying the adhesive to a substrate.

As to claim 4, Alper/Goulait/Fries discloses a method for applying adhesive to a substrate Alper/Goulait/Fries discloses the adhesive is suitable for diapers (Alper col. 1, lines 58-67). Applicant has amended claim 4 to narrow the temperature of the application head. However, applicant has not provided criticality for the claimed temperature. Alper/Goulait/Fries does not specifically disclose the temperature of the hot melt adhesive in the tank as compared to the temperature of the hot melt adhesive in the applicator. However, Alper/Goulait/Fries discloses the need for the adhesive going to the substrate to be cooled (Alper col. 2, line 56 through col. 3, line 5). It would

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have been obvious to one of ordinary skill in the art at the time the invention was made to modify the temperature of the adhesive in the application head to be lower than the temperature of the adhesive in the tank so the adhesive being deposited on the substrate is cool enough for heat-sensitive fibers, which Alper/Goulait/Fries teaches is desired (Alper col. 3, lines 3-5).

As to claim 5, Alper/Goulait/Fries discloses the present invention substantially as claimed. Alper/Fries discloses the melt viscosity of the hot melt adhesive within the claimed range (Alper Table 1 and Table 2 and col. 18, lines 1-2). However, Alper/Goulait/Fries does not specifically disclose the viscosity of the adhesive in the application head. Alper/Goulait/Fries teaches reducing the temperature of the adhesive composition even if the air stream of the spray nozzle is heated (Alper col. 2, lines 55-66; col. 12, lines 24-30 and 61-62). Alper further teaches higher viscosities occur with lower temperatures (Alper col. 3, lines 1-9 and 49-52). Alper/Goulait/Fries recognizes the adhesive temperature can be varied with his adhesive composition and this will affect viscosity. Alper/Goulait/Fries, therefore recognizes the viscosity is a result effective variable of temperature and composition. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the article of Alper/Fries with the claimed viscosity of the adhesive in the application head, since discovering an optimum value of a result effective variable involves only routine skill in the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacqueline F. Stephens whose telephone number is (571) 272-4937. The examiner can normally be reached on Monday-Friday 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tanya Zalukaeva can be reached on (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jacqueline F Stephens  
Examiner  
Art Unit 3761

August 22, 2005